

Version with markings to show changes made

FRICITION FREE GRAND PIANO ACTION

FIELD OF THE INVENTION

The present invention relates to grand pianos affected by excessive friction between the knuckle dependent from the shank carrying the piano hammer and the lifting surface of the jack lifting the knuckle.

BACKGROUND OF THE INVENTION

Conventional grand pianos are plagued by excessive friction between the knuckle and the lifting surface of the jack causing noise requiring frequent regulation with lubricant being applied to the knuckle and the lifting surface of the jack to reduce the excessive friction. Friction is caused by gravity of the hammer assembly, and made excessive by the jack spring being in a fixed constant tension exerting pressure upon the jack. ~~[and the wippen lever]~~

SUMMARY OF THE INVENTION

In the present invention the jack spring is relocated making it possible to disable the jack spring during disengagement of the jack from the knuckle, thereby eliminating the excessive friction caused by the fixed constant tension of the jack spring exerting pressure upon the jack. ~~[and the wippen lever]~~ A flexible means such as a tape, string or chain effecting the same results.

PATENTS RELATING TO THE PROBLEM OF EXCESSIVE FRICTION

Pinholm #4,774,868

Steinway #5,511,454 - #5,911,167

Baldwin #6,232,537.